

Near Freehold, N. J., upon the 7th, while the sky was clear overhead with clouds in the northwest, and heavy shower in the southeast, discharges of electricity took place from the latter to the former, and a barn was struck by lightning and consumed.

(2.) *Auroras*.—The only auroras reported to have been seen were at Memphis on the 7th, Buffalo on the 9th, and Santa Fé, N. M., on the 23d.

## OPTICAL PHENOMENA.

(1.) *Solar Halos*.—These were most frequently observed on the 1st and 2nd, in advance of the low barometer, No. I, in Michigan, Pennsylvania, New York, Massachusetts, New Hampshire, Vermont and Maine. They were seen in one or more States upon every day, except the 3rd, 4th and 16th; in Delaware, New Hampshire, New York and Connecticut, the 10th; in Massachusetts, New Jersey, Mississippi and Louisiana, the 19th; in Maine, New Hampshire, New York, Ohio and Wisconsin, the 23rd.

(2.) *Lunar Halos* are reported to have been seen in Illinois, Ohio, New Jersey, Massachusetts and Maine, on the 10th; in Kansas, Wisconsin, Texas, North Carolina and Rhode Island, on the 12th; in Maine, Virginia, North Carolina, Georgia and Illinois, on the 13th; in Massachusetts, Rhode Island, New York, Wisconsin, Iowa, Missouri, Kansas and Nebraska, on the 14th. During the first and last parts of the month very few were observed.

(3.) *Mirage*.—On the 1st, at Fort Niagara, N. Y.; 2nd, Pt. Pleasant, La.; 4th, 10th, 16th and 19th, at Atlanta, Kan.; 16th, at Ellinwood, Kansas.

## MISCELLANEOUS PHENOMENA.

(1.) *Zoological*.—*Grasshoppers* were reported numerous at Cheyenne, W. T., on the 6th, 8th, 23d, and 24th; at Denver, C. T., from the 8th to the 14th, 19th to 28th, 30 and 31st; at Ellinwood, Kan., on the 18th; near Las Vegas, N. M., on the 26th. *Colorado Beetle* at Manitowoe, Wis., up to the 22d; at Atco, N. J., and Brookhaven, N. Y., destroying vegetation. *Winged Ants* at Kensico, N. Y., on the 29th. *Martins* left Independence, Iowa, on the 20th; Jacksonville, Ohio, on the 14th.

(2.) *Forest fires* southeast of Marquette, Mich., on the 3d.

(3.) *Meteors* were noticed least frequently about the middle of the month. They were seen on the 5th in Iowa, Minnesota, Missouri, Nebraska, Louisiana, Tennessee, Virginia, and New York; the 6th in Illinois, Indiana, Iowa, Nebraska, Missouri, Minnesota, and Mississippi; the 10th in Iowa, Missouri, Indiana, Louisiana, New York, and Rhode Island; the 12th in Dakota, Iowa, Illinois, Indiana, Louisiana, and New Jersey.

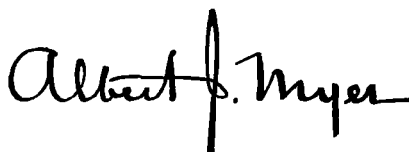
(4.) *Earthquakes* at El Monte, Cal., hummings on the 4th, and rumbles on the 24th.

(5.) *Zodiacal lights* at Fall River Mass., on the 27th; at Burlington, Iowa, 30th and 31st.

(6.) *Lunar rainbows* at Mason City, Ia., on the 9th; Leesburgh, Ind., 10th; Gardiner, Me., 13th; Brook Haven, Miss., 18th.

(7.) At Marquette, Mich., a comparison of the changes in the barometer, with those in the surface of the water in the lake, from tri-daily observations, shows that they acted in a contrary manner sixty-six (66) times, and together twenty-seven (27) times.

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